

REMARKS

This application has been reviewed in light of the Office Action dated April 21, 2006. Claims 1-19 are pending in this application. Claims 1, 7, and 17 have been amended to define still more clearly what Applicants regard as their invention. Claim 20 has been added. Claims 1 and 7 are independent.

Claim 17 was objected to under 37 C.F.R. § 1.75(c) as being in improper multiply dependent form. Applicants have amended Claim 17 accordingly, and withdrawal of the objection is respectfully requested.

Claims 1-3, 5-9, and 11-19 were rejected under 35 U.S.C. § 103(a) as being obvious from U.S. Patent 6,314,452 (*Dekel et al.*) in view of the publication entitled "The Importance of Percent-Done Progress Indicators for Computer-Human Interfaces" (*Myers et al.*); and Claims 4 and 10, as being obvious from *Dekel et al.* in view of *Myers et al.*, and further in view of U.S. Patent 5,436,637 (*Gayraud et al.*).

Claim 1 is directed to a method for alerting during the progressive decoding of a digital image coded by bitplanes with a region of interest coded by bitplanes to be decoded first, at least a bitplane to be decoded last corresponding to data not belonging to the region of interest. The method includes detecting an end of decoding of the region of interest by checking at least a number of received bitplanes, and activating an indication of the end of decoding of the region of interest by displaying an indicator in an indicator-display area at a predetermined position on a screen.

Dekel et al., as understood by Applicants, relates to transmission of still images over relatively low-speed communication channels. Fig. 2, cited in the Office

Action, is an overall system workflow diagram, and Fig. 16, also cited in the Office Action, is a flow diagram discussing an outer loop of a client decoding algorithm.

Myers et al., as understood by Applicants, relates to a so-called “percent done progress indicator,” which is defined in that document as “a graphical technique which allows the user to monitor the progress through the processing of a task.”

Notably, by virtue of the region of interest as recited in the method of Claim 1, the first bitplanes to be received and decoded are data representing this region of interest, while bitplanes to be received and decoded last correspond to parts of the image outside the region of interest. See, e.g., page 9, lines 23-27, and page 10, lines 7-8, of the specification.^{1/}

It can be pointed out in this regard that there may be an overlap between these two kinds of data (region of interest, other regions) as explained in the specification at page 10, lines 19-32. Even in this embodiment, however, the first bitplane to be received and decoded corresponds to the region of interest, while at least one last bitplane relates to data outside the region of interest. See, e.g., page 10, line 22 of the specification, which states that “the boost factor can take any value greater than or equal to one.”

In this context, where a digital image to be decoded includes data relating to a region of interest and data outside this region of interest, there is a particular advantage in detecting and indicating the end of decoding the region of interest by checking receipt of the corresponding bitplanes.

^{1/}It is of course to be understood that the references to various portions of the present application are by way of illustration and example only, and that the claims are not limited by the details shown in the portions referred to.

Applicants submit that the recitations of Claim 1 and this corresponding advantage cannot be taught or suggested by *Dekel et al.*, as the region of interest discussed in *Dekel et al.* precisely corresponds to the part of the image that should be transmitted and decoded. For example, the abstract of *Dekel et al.* states that “the encoding algorithm is performed only for the ROI”. See also column 1, lines 25-29 of *Dekel et al.*

Dekel et al. therefore teaches away from the use of coded bitplanes corresponding to data not belonging to the region of interest, as recited in Claim 1.

As *Dekel et al.* relates to a different use of regions of interest than in the method of Claim 1, Applicants submit that *Dekel et al.* cannot teach or suggest the method of Claim 1, even if combined with *Myers et al.* (and even assuming *arguendo* that such combination would be proper), as nothing in *Myers et al.* would remedy the deficiencies of *Dekel et al.*

Accordingly, Claim 1 is believed to be patentable over *Dekel et al.* and *Myers et al.*, whether considered separately or in any permissible combination (if any).

Independent Claim 7 is a device claim corresponding to method Claim 1, and is believed to be patentable over *Dekel et al.* and *Myers et al.* for at least the same reasons as discussed above in connection with Claim 1.

A review of the other art of record has failed to reveal anything which, in Applicants' opinion, would remedy the deficiencies of the art discussed above, as references against the independent claims herein. Those claims are therefore believed patentable over the art of record.

The other claims in this application are each dependent from Claim 1 or 7 discussed above and are therefore believed patentable for the same reasons. Since each

dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicants respectfully request favorable reconsideration and early passage to issue of the present application.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'R. A. DiPerna', written over a horizontal line.

Raymond A. DiPerna
Attorney for Applicants
Registration No. 44,063

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200